## **CLAIMS**

What is claimed is:

## 5 1. An apparatus comprising:

at least one carbon nanotube;

wherein each carbon nanotube is formed directly on a protrusion by the steps comprising:

creating at least one nanosize catalyst retaining structure; and forming the at least one carbon nanotube from said at least one nanosize catalyst retaining structure.

## 2. An apparatus comprising:

at least one carbon nanotube;

wherein each carbon nanotube is formed directly on a protrusion by the steps comprising:

placing a catalyst within at least one nanosize pore; and forming the at least one carbon nanotube from said at least one nanosize pore.

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## 3. An apparatus comprising:

at least one carbon nanotube;

wherein each carbon nanotube is formed directly on a protrusion from a nanosize pore containing catalyst.

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